

Newsletter from the Pre-college Education Department at the INEEL

Education and Research Initiatives

Vol. 4

Spring 2003

INEEL
Science & Engineering



2003 Science and Engineering Exposition October 22 – 25, 2003 Idaho Falls, Idaho

Mark your calendar NOW and don't miss the 3rd annual INEEL Science and Engineering Expo! The Idaho National Engineering and Environmental Laboratory (INEEL) has teamed up with the American Chemical Society to bring the Expo to the Museum of Idaho in association with National Chemistry Week.

The INEEL Science and Engineering Expo is an exciting, high impact, inquiry-based educational outreach experience that entices students to explore the science, mathematics, engineering, and technology of an adult world. The Expo is aimed toward youth in the middle school grades 5 to 8 and grade 9, teachers and parents, and it is of interest to community leaders and learners of all ages. The Expo is a deliberate effort to introduce Idaho's students of this grade and age group to a wide and diverse range of potential careers in science, mathematics, engineering, and technology. All activities are linked to the National Science Education Content Standards and correlated Idaho State Achievement Standards Strands II-X.

Expo people who deliver the activities are interested and interesting. They are people who stimulate curiosity, inform or teach through engaging hands-on exhibits, interactive demonstrations, experiments, simulations, and crowd-pleasing presentations.

We expect more than 5,000 people to attend and we encourage you and your students to be there!

The INEEL Science and Engineering Expo is open and free to the public. Here is the schedule:

- Kick-off with nationally recognized speaker
Willard Arts Center Colonial Theatre
October 22 7 pm-9 pm
- Student Day at Museum of Idaho
October 23 9 am-5 pm
- Student Day at Museum of Idaho
October 24 9 am-5 pm
- Family Day at Museum of Idaho
October 25 9 am-5 pm

Students can be bused to the Museum of Idaho on

Thursday and Friday and should plan on spending at least two hours experiencing the Expo activities.

To schedule your students to attend, please contact::

Morgan Rawson
Museum of Idaho
(208) 522-1400 ext. 300
mrawson@onewest.net

Find additional information at website:

<http://education.inel.gov/precollege/sci-expo.asp>
or contact Elda D. Zounar at zouned@inel.gov,
(208) 526-4491.



A young girl shows surprise as she safely pets a live millipede.



A child experiments with a magnet and a liquid-filled container holding iron filings.



Can your school use a free computer?

Your school may apply for excess equipment from the Idaho National Engineering and Environmental Laboratory (INEEL) through the Math and Science Equipment Gift Program. The equipment is functioning and includes computers and related items, such as printers, modems, servers and routers, as well as other lab and shop equipment.

This program is sponsored by the U.S. Department of Energy in cooperation with the Idaho State Department of Education (ISDE) and it is administered through the INEEL. Preference is given to math and science needs. Schools are responsible for picking up the equipment at the INEEL and for any costs incurred to move the equipment.

You may request application instructions from Jan Hill- Hancock, Education Services Coordinator at 208-526-0318, or e-mail address [\[hillje@inel.gov\]](mailto:hillje@inel.gov) or website <http://education.inel.gov/precollege/math-sci-gift.asp>

MATHCOUNTS 2002-2003

MATHCOUNTS is a nationwide coaching and competition program for middle school students designed to encourage and improve math skills and promote student interest in mathematics by making math achievement as challenging, exciting and as prestigious as a school sport. Middle School "Mathletes" from fifteen eastern Idaho schools competed recently in the regional contest to determine which teams and individuals would advance to the state level competition. A total of four teams and 11 individuals from eastern Idaho qualified to compete in the state finals held on March 8, in Boise.

REGIONAL FINAL TEAM STANDINGS

RANK	SCHOOL TEAM	CITY
1	Rocky Mountain M.S.	Idaho Falls
2	Hawthorne MS	Pocatello
3	Clair E Gale Jr. High	Idaho Falls
4	Sandcreek MS	Idaho Falls
5	Taylorview Jr. High	Idaho Falls
6	Eagle Rock Jr. High	Idaho Falls
6	Firth Middle School	Firth

Approximately 100 participating students received certificates; winners receive trophies and scholarships awarded by the ISU College of Engineering. Top students and teams winning state advance to compete in Nationals in Chicago in May 9, 2003.

Sponsors of the regional **MATHCOUNTS** competition included the Southeastern Chapter of the National Society of Professional Engineers, the Idaho National Engineering and Environmental Laboratory and Idaho State University and the Chairman was Richard Feuerborn, Vice-President K&F Engineers, phone (208) 234-0044. For details on how to obtain and incorporate **MATHCOUNTS** materials into your school's math curriculum, visit website www.mathcounts.org. To register your school to participate in next year's competition, please contact Richard Feuerborn at the number listed above, or Jan Hill-Hancock, 526-0318, hillje@inel.gov

Education Programs

Pre-College Programs

The INEEL's pre-college education programs engage students in science, mathematics, engineering, and technology, and develop K-12 teachers to help those students succeed.

INEEL's objectives are to

1. Equip K-12 teachers with skills and knowledge to strengthen their teaching through teacher development and programs
2. Give pre-service teachers opportunities to apply relevant concepts
3. Help students in grades 6-12 develop their problem-solving skills, disciplinary core competencies, and employable skills for careers in science, math, and technology
4. Excite interest of students in grades K-12 in the scientific disciplines
5. Reach out to families to participate in science, math, and technology activities.

[JASON Idaho](#) - engaging students and teachers in math, sciences, and technology

[Teaming Teachers with INEEL](#) - placing practicing teachers with INEEL researchers working on research problems

[Student Action Teams](#) in Science, Mathematics, Engineering, and Technology - placing teachers and high school students in teams on research problems working with INEEL researchers

[Scholastic Tournament](#) - giving Idaho high school students an opportunity to participate in the annual DOE national science bowl